

## **REMARKS**

Applicant's counsel thanks the Examiner for the careful consideration given the application.

Claim 1 has been amended to include varying the knitting density during production in a way which is not shown or suggested by the prior art. Support for the amendment to claim 1 is found in current claim 4, which corresponds to the subject matter added to claim 1 (claim 4 is identical but refers to a double needle bed machine). No new matter has been added.

### **Claim rejections - 35 USC §102**

The Examiner considered again method claims 1-5, 8-15 to be anticipated by patent DE2843264.

The Examiner explains in the paragraph "Response to Arguments" that the reason for the above objection is that he considers the wording "needle bed" to be equivalent to "needle bar" in warp knitting machines, and also that the enclosures filed in our previous reply to demonstrate that the "needle bed" is a fixed element in conventional warp knitting machines were not considered relevant since they referred only to weft knitting and not to warp knitting.

The opinion of the Examiner is respectfully traversed, since enclosure 3 of our previous reply, which is herewith enclosed again, refers indeed clearly to warp knitting machines and not to weft knitting.

In fact the enclosure "Verfahren der Web und Maschenwarenherstellung" which is an important knitting text for the University by Dr. Ing. G. BROCKEL relates to warp knitting, see the second page and the translations in English of original German wording provided by the applicant. The machine illustrated is clearly and without doubt a warp knitting machine since it is a Raschel machine (it is well known in the knitting art that Raschel machines are warp machines, and it is confirmed also by the present application and by document US3681944 cited by the Examiner at the beginning of column 1 "*The invention relates to warp knitting machine such as ..... Raschel knitting machine ....*". Furthermore the yarn which is fed to the machine is called "*warp yarn*", confirming that it is a warp machine.

It is to be noted that this document clearly indicated that the moving element which moves together with the needles is defined as "needle bar" (which is the same term used in the prior art documents cited by the Examiner, and which is indicated in the figure with a double arrow indicating the up-and-down movement of the same), while the other element (which is not indicated as movable since it is fixed) is defined as "needle bed", exactly as in the present application. It is to be noted that the "needle bed" is the element which defines the "sinking plane" or "knocking over-plane" with respect to the needles, which is clearly illustrated and explained in the present application, and which defines the density of the knitted fabric.

The enclosed document demonstrates that in the warp knitting technology "needle bed" indicates an element which is fixed during the knitting process and in which the needles move, while "needle bar" indicates the movable element to which the needles are mounted and which moves together with the needles.

In order to further clarify the differences between the current invention and the prior art, claim 1 has been amended to clarify that the "needle bed (FNA) moves in order to vary the knitting density by varying the height of the sinking plane (PAB) with respect to the needles (N) sliding in the same bed (FNA). Amended claim 1 states that the movement of the needle bed involves a movement of the height of the sinking plane during the production of the fabric. This technical feature is not shown or suggested by the prior art.

Furthermore amended claim 1 clarifies that the needles slide in the needle bed, thereby confirming that by "needle bed" does not indicate a conventional needle bar (since the needles are fixed to the needle bar and do not slide in the needle bed).

None of the cited documents refer to a movement of the needle bed during the knitting process, or to a movement of the sinking plane during the knitting process or to a variation of the knitting density obtained in such a way. The solution according to amended claim 1 allows to vary the knitting density during production in a way which is not shown or suggested by the prior art.

Based on the above arguments and amendments, it is felt that amended claim 1 is clearly new, inventive and nonobvious and defines over the cited prior art and is therefore allowable. For the same reasons, dependent claims 2-16 also define over the prior art and are thus allowable.

**Claim rejections - 35 USC §103**

Regarding product by process claims 17-21, the Examiner states that the applicant has the burden of proof to demonstrate that the products are materially different to the prior art one. For all what is stated above with respect to process claims 1-16, it is clear that products obtained by such a process do have clear distinguishing features with respect to the prior art, since they are characterized by a fabric density which is varied to an extent and in such a way which was not possible with known processes.

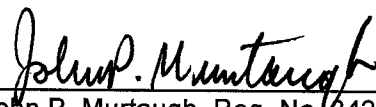
Consequently such products, obtained by a method according to present claims 1-16, are materially different from known products obtained by known methods.

Therefore, also considering what is explained above regarding the remarkable difference between the current invention and known processes, it is felt that the product by process claims 17-21 are clearly new and inventive and define over the cited prior art, and are therefore allowable.

Since all of the concerns of the Examiner have now been resolved, reconsideration and allowance of the application is respectfully requested.

If any fees are required by this communication, please charge such fees to our Deposit Account No. 16-0820, Order No. BUG4-40378.

Respectfully submitted,  
PEARNE & GORDON LLP

By   
John P. Murtaugh, Reg. No. 34226

1801 East 9<sup>th</sup> Street  
Suite 1200  
Cleveland, Ohio 44114-3108  
Phone: (216) 579-1700  
Fax: (216) 579-6073

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Dr.-Ing. G. Bröckel

## Verfahren der Web- und Maschenwarenherstellung

### 2. Teil Verfahren zur Maschen- warenherstellung

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Zusammenfassung von Vorlesungen  
an der Universität Stuttgart

## 21.2 Elemente zur Maschenbildung (Wirken)

Ausser den bereits beschriebenen Nadeln sind bei den Wirkmaschinen noch folgende nadelabhängigen Wirkelemente zur Maschenbildung erforderlich:

### Kulierplatinen

Zum Legen des Fadens in Schleifenform

### Einschliessplatinen

Zum Halten und Führen der Fäden und Maschenschleifen.

### Pressen

Zum Schliessen der Spitzennadeln (Eindrücken der Nadelspitze in die Tasche) und bei Rundwirkmaschinen zur Musterrung (Pressmuster), ausgebildet als Profilschiene bei Kettenwirkmaschinen und als Pressrad bei Rundwirkmaschinen.

### Abschlagplatinen

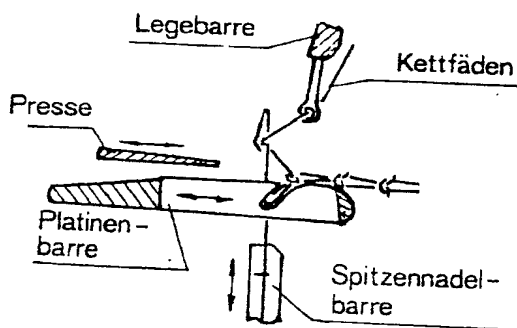
Zum Halten und zum Vorschieben der Maschen über die Nadelköpfe.

### Warenabzug

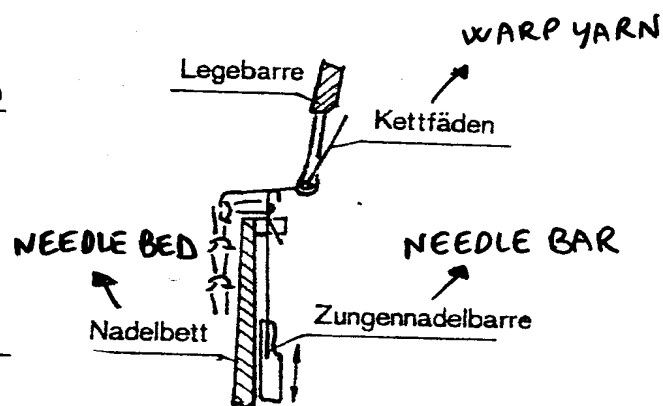
und bei Kettenwirkmaschinen:

### Lochnadeln, Legeröhrchen, Fadenführer

zur Führung der Fäden.



Wirkelemente beim Kettenwirkautomaten



Wirkelemente bei der Raschelmachine

### Zungenanschlüge

Elemente zur Verbindung des Hochschnellens der Nadelzungen beim Einschliessen.

↓  
**RASCHEL MACHINE**